

What is claimed is:

1. An arthroplasty device for implantation into a bone, comprising:
a disc having a threaded outer surface capable of threaded engagement within the interior surface of a bone;
5 a resorbable material, having an outer surface capable of threaded engagement within the interior surface of said bone, contacting said disc;
a sleeve having an inner opening and an outer surface, containing at least one section contacting the bone having a textured surface to promote bone ingrowth, sized to fit tightly within the bone;
10 and a prosthetic component comprising an elongated shank having an outer surface extending between a proximal end and a relatively narrow distal end;
wherein when said distal end of said prosthetic component is inserted through said sleeve in said bone, said distal end contacts said resorbable
15 material to support said component to decrease stress on said textured surface of said sleeve while said material resorbs.
2. The device of claim 1, wherein said resorbable material comprises collagen.
3. The device of claim 1, wherein said resorbable material is selected
20 from high molecular weight poly-L-lactic acid (PLLA) polymers, calcium hydroxyapatite, tricalcium phosphate, and polydiaoxanone (PDS).
4. The device of claim 1, wherein said disc contains a drainage through hole.
5. The device of claim 1, wherein said textured surface of said bone
25 contacting section of said sleeve comprises an array of beads.

6. The device of claim 1, wherein said textured surface of said bone contacting section of said sleeve comprises an array of fibrillar wires.
7. The device of claim 1, wherein said textured surface is coated with a bone growth promoting material.
- 5 8. The device of claim 7, wherein said bone growth promoting material comprises bone morphogenetic protein (BMP).
9. The device of claim 1, wherein said device is implanted into a femoral bone.
10. A prosthetic joint replacement device, comprising:
- 10 an elongated shank having a proximal end containing an angularly extending stem and a relatively narrow distal end for implantation into a bone cavity;
- a spherical component coupled to said stem;
- a hemispherical component coupled for rotation to said spherical
- 15 component;
- and a resorbable material, located between said proximal end of said shank and said hemispherical component, surrounding said stem and said spherical component;
- wherein said resorbable material restricts motion between said shank
- 20 and said hemispherical component until said material is resorbed.
11. The device of claim 10, wherein said resorbable material comprises collagen.
12. The device of claim 10, wherein said resorbable material is selected from high molecular weight poly-L-lactic acid (PLLA) polymers, calcium
- 25 hydroxyapatite, tricalcium phosphate, and polydioxanone (PDS).

13. The device of claim 10, wherein said prosthetic device is used as a hip replacement.
14. The device of claim 10, wherein said resorbable material dissolves over a period of months.
- 5 15. The device of claim 10, wherein said hemispherical component further comprises an inner lining for contacting said spherical component.